



**Model 560-5141-5
RJ11 Passive Output Interface Manual**

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SECTION ONE

1. GENERAL INFORMATION

1.1. PURPOSE OF EQUIPMENT

The TrueTime Model 560-5141-5 RJ11 Passive Output Interface provides the output interface for a compatible front function card. The six pairs of \pm Outputs are fed directly through the backplane connector from the front function card. The output signals are distributed via 55 ohm traces to 6 RJ11 connectors at the rear panel for use in differential mode with 120 ohm balanced termination. There are four ground pins associated with each pair of \pm Outputs.

1.1.1. PHYSICAL SPECIFICATIONS

Dimensions: 0.8" w X 4.4" h X 5.0" d (2 cm X 11 cm X 13 cm)
Weight: Approximately 1/2 pound (1/4 kg)

1.1.2. ENVIRONMENTAL SPECIFICATIONS

Operating Temp: 0° to +50°C
Storage Temp: -40° to +85°C
Humidity: Up to 95% relative, non-condensing
Cooling Mode: Convection

1.1.3. POWER REQUIREMENTS

Power: None

1.1.4. FUNCTIONAL SPECIFICATIONS

1.1.4.1. OUTPUT CONNECTOR

Type:	RJ11		
Quantity:	6		
Pinout:			
Pin 1 GND	Pin 3 -Output	Pin 5 GND	
Pin 2 GND	Pin 4 +Output	Pin 6 GND	

1.1.4.2. DRC CARD COMPATIBILITY

Location: Slot 1-17 with compatible function card in front slot.
Compatibility: See Card Compatibility Matrix.

SECTION TWO

2. INSTALLATION AND OPERATION

2.1. HOT-SWAPPING

All cards, input cables and output cables are hot swappable. It is not necessary to remove chassis power during insertion or removal. The system is designed to protect against permanent effects and minimize any temporary effects of hot swapping.

2.2. REMOVAL AND INSTALLATION

CAUTION: Individual components on this card are sensitive to static discharge. Use proper static discharge procedures during removal and installation.

Refer to CARD COMPATIBILITY section prior to installing new card.

To remove card, loosen the captive retaining hardware at the top and bottom of the assembly, then firmly pull on the handle (or on any connector on rear panel adapter cards) at the bottom of the card. Slide the card free of the frame. Refer to the SETUP section for any required switch settings; or, set them identically to the card being replaced. Reinstall the card in the frame by fitting it into the card guides at the top and bottom of the frame and sliding it in slowly, avoiding contact between bottom side of card and adjacent card front panel, until it mates with the connector. Seat card firmly to avoid contact bounce. Secure the retaining screws at the top and bottom of the card assembly.

2.3. SETUP

This card has no setup requirements.

2.4. FAULT INDICATION

This card has no fault indication.

2.5. MAINTENANCE

This card has no maintenance requirements.

SECTION THREE

3. THEORY OF OPERATION

3.1. GENERAL INFORMATION

This section contains a detailed description of the circuits in the Passive Output card. These descriptions should be used in conjunction with the drawings in SECTION FOUR.

3.2. HARDWARE DESCRIPTION

The Passive Output card incorporates 6 6-pin RJ11 connectors. Each set of connector pins includes a complementary \pm Output pair with ground pins on either side for shielding and impedance-control within the cable.

3.3. DETAILED DESCRIPTION

Reference drawing 560-5141-5. Each connector pin is sourced via the backplane connector from individual drivers on the front function card via 55 ohm controlled-impedance traces on the Passive Output card. The PCB traces are optimized for driving a pair of wires with 120 ohm characteristic impedance and 120 ohm balanced termination.

SECTION FOUR

4. DETAILED DRAWINGS

4.1. 560-5141-5 DETAILED DRAWINGS / BILL OF MATERIALS